## SUBJECT INDEX

80Sn-20Zn alloy, 1341

AC impedance, 2019 Acid corrosion, 1, 511, 2067 Acid inhibition, 761, 877, 1845 Acid lubrication, 1595

AES, 95 AFM, 147 Aging, 1109 Al-Nb alloys, 9

Alloy, 95, 295, 321, 355, 589, 935, 1021, 1239, 1351, 1365, 1915

Alloys, 339, 1093, 1831

Aluminium, 281, 295, 339, 399, 495, 701, 719, 949, 1109, 1351, 1505, 1531, 2053, 2117

Aluminium alloy, 835, 2095 Aluminium alloys, 59, 731

Aluminium composite, 1075

Amorphous structures, 9, 305, 355, 464, 1351

Anodic films, 281, 339, 555, 719, 731, 1253

Anodized films, 1075 Anodizing, 1109 Atmospheric corrosion, 95, 193, 473, 655, 823, 1505, 1641, 1845, 2039 Atomic force microscopy, 701 Atomic absorption, 2039

Boron-doped diamond, 2019 Brass, 1307, 1915

Cadmium, 1291
Carburization, 1021
Cathodic protection, 855, 1451
Ceramic, 511
Cerium, 1061, 1341, 1811
Chloride corrosion in concrete, 1001
Chloride, 949
Chlorination, 115
Chromium, 43, 761, 1741
Coating breakdown, 1605
Coatings, 1087
Cobalt, 1831
Complex ion formation, 981
Composites, 1443, 1949
Concrete reinforcing, 1657

Concrete, 1451
Conversion coatings, 701
Copper, 27, 193, 495, 555, 655, 949, 1119, 1221, 1265, 1307, 1505, 1641, 2039
Corrosion, 511, 1451, 1981
Corrosion fatigue, 2117
Corrosion of alloys, 1177
Corrosion products, 2039
Corrosion protection, 1341
Crevice corrosion, 419, 453, 473, 1791
Cyclic voltammetry, 807, 2019, 2181

De-alloving, 1883 Dichromate, 1341 Durability, 1109

EDS, 1561 EDX, 59 EIS, 285, 295, 333, 377, 655, 961, 1075, 1087, 1221, 1239, 1605, 1625, 1665, 1711, 1757, 1925, 1981, 2053 Electrochemical calculation, 243, 1265 Electrochemical dissolution, 1981 Electrochemical noise analysis, 255 Elevated temperatures, 107 Ellipsometry, 1253 EPMA, 1021 Erosion, 511

Fe-Al alloys, 2193 Fluorescence, 231

Galvanic corrosion, 627, 775 Galvanostatic, 719, 731, 1897 Gold, 981 Green Rust, 1699 Green Rusts, 1673

High temperature, 1093 High temperatures, 1811 High-temperature oxidation, 1459 Hot corrosion, 133, 1193 Hydrogen absorption, 529, 1469 Hydrogen embrittlement, 159, 175, 613, 1545, 2117, 2151, 2171 Hydrogen permeation, 529, 1051, 1469 Inhibition, 1481 Interfaces, 893 Intergranular corrosion, 175, 295 Intermetallics, 495, 1083, 1883 Internal oxidation, 1831 IR spectroscopy, 193, 1845, 1925 Iron, 77, 761, 877, 987, 1093, 1193, 1265, 1469, 1585, 1741, 1811 Iron—chromium alloys, 761 ISS, 2193

Lead, 1443 Low alloy steel, 1625 Low strain-rate, 1545

Magnesium, 855, 1981 Manganese alloys, 1965 Mass transfer, 1265 Measurement of evolved hydrogen, 1481 Metal coatings, 1329, 1757 Metal matrix composites, 1153 Microbiological corrosion, 807 Microgravimetry, 2039 Microwave plasma, 2019 Mild steel, 159, 175, 807, 1001, 1087, 1561, 1595, 1757, 1925 Modelling, 739 Modelling studies, 243, 1265, 1711 Molten salts, 627, 1193 Monitoring, 1451 Mössbauer spectroscopy, 1585, 1673,

Negative difference effect, 1981 Neutral inhibition, 555, 901, 1221, 1925 Ni–Zr alloy, 2005 Nickel, 627, 969, 1605, 1741 Nickel alloy, 115, 209, 465 Nickel alloys, 231, 565 Nickel oxide, 1459

Organic coating, 1221 Oxidation, 9, 59, 147, 231, 399, 1021, 1083, 1119, 1571, 1673, 2215

Passive films, 159, 175, 209, 305, 321, 333, 377, 589, 935, 1061, 1253, 1351, 1365, 1897, 1965, 2005, 2095, 2181, 2193

Phosphate coatings, 1757

Pitting corrosion, 27, 285, 355, 419, 495, 701, 913, 949, 961, 1061, 1239, 1531, 1665, 1771, 2005

Platinum, 627 Polarisation, 1291, 1307 Polarization, 159, 175, 285, 399, 555, 589, 807, 935, 961, 1365, 1625, 1665, 1915, 2005, 2181 Polarization resistance, 453, 877 Polymer coatings, 255, 1625 Potentiodynamic, 77, 761, 835, 1119, 1595 Potentiostatic, 27, 305, 399, 465, 495, 589, 655, 1253, 1657, 1771, 1791, 1883, 1949, 1965, 2151, 2171, 2193 Potentiostatic cyclic voltammetry, 209 Pourbaix diagram, 43, 107, 159, 175, 1673, 1741 Pourbaix diagrams, 969 Precipitates, 949

RBS, 339, 719, 731 Runoff, 2039 Rust, 77, 739, 1561, 1845

Sealing, 1109 Segregation, 987 SEM, 59, 495, 655, 893, 1291, 1531, 1561, 1571, 2053, 2117 SIMS, 1531, 1897, 2215 Slow strain rate technique, 1873 Sodium carbonate, 627 Soil corrosion, 1585 Sputtered films, 935, 1365, 1571 SSRT, 1725 Stainless steel, 285, 333, 453, 473, 483, 513, 893, 913, 961, 1037, 1061, 1193, 1665, 1725, 1771, 1791, 1873, 1897, 1935, 2067, 2181 Steel, 255, 529, 1153, 1451, 1657, 1711, 1845, 2151, 2171, 2215 Steel reinforced concrete, 739 STEM, 565 STM, 855 Stress corrosion, 159, 175, 473, 565, 835, 1037, 1725, 1873, 1915, 1935, 1949 Sulfidation, 9, 59, 1093, 1811 Sulfide inclusions, 913 Sulphidation, 1571

Tafel polarization, 2019 TEM, 281, 339, 719, 731, 2005

Superalloy, 133

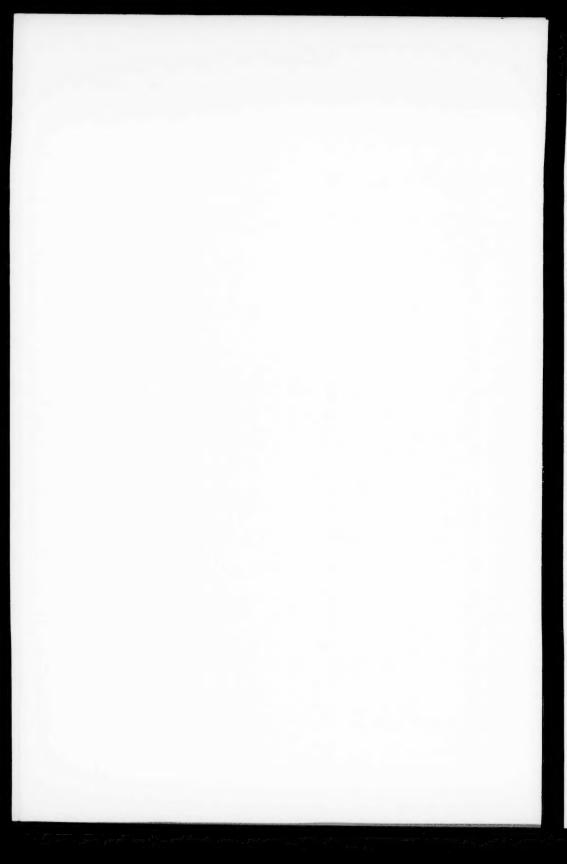
Thermal cycling, 1083 Thermodynamic, 1119 Thiosulfate, 913 Titanium, 893, 1253, 1545 Titanium alloys, 377

Weight gain, 9, 59 Weight loss, 1, 133, 453, 655, 981, 1119, 1443, 2067

X-ray diffraction, 95 XAS, 2095 XPS, 115, 321, 355, 377, 495, 589, 719, 913, 935, 987 1221, 1351, 1365, 1625, 1897, 1965, 2005, 2181, 2193 XRD, 59, 1021, 1505, 1561, 1571, 1585, 1673, 1699

Yttrium, 1093, 1831

Zinc, 107, 1307, 1481, 1505, 1641, 1757, 2053 Zinc composite, 1 Zirconium, 95, 355



## **AUTHOR INDEX**

Abels, J.-M. 115
Ahlberg, E. 77
Akiyama, E. 305, 321, 355, 589, 1351, 1365, 1965
Aksüt, A. A. 761
Al-Kharafi, F. M. 681
Almeida, E. 1561
Alvarado-Gil, J. J. 1641
Álvarez, J. F. 133
Aramaki, K. 1625
Arora, P. 739
Asami, K. 95, 305, 321, 355, 589, 935, 1351, 1365, 1965, 2005
Atrens, A. 855, 1981
Autie, M. 815

Baba, H. 555 Badawy, W. A. 681 Baldonedo, J. L. 1109 Barba, C. 1109 Barbosa, M. A. 333, 377 Baudin, H. 1883 Bautista, A. 1109 Bellanger, G. 209 Berghult, B. 77, 1119 Besseyrias, A. 1883 Betancourt, N. 815, 823 Beverskog, B. 43, 107, 969 Bhattarai, J. 355 Biedenkopf, P. 1193 Blanc, C. 495, 949 Bobeth, M. 231 Bousselmi, L. 1711 Boutevin, B. 1925 Boutry-Forveille, A. 1469 Brass, A. M. 1469 Breslin, C. B. 1061, 1341 Brunoro, G. 1221, 1949 Buenfeld, N. R. 1001, 1451 Burstein, G. T. 1499 Butt, D. P. 1605, 2067

Cao, C.-N. 443 Casanova, T. 529 Castello, P. 1093, 1811 Chang, S. C. 1021 Chen, C. 255, 409, 1061, 1075 Chene, J. 1469 Cheng, L. H. 893
Cheng, S. W. 1165, 2035
Cheriet, S. 1239
Clarke, C. F. 1545
Clarke, D. R. 231
Codaro, E. N. 655
Cole, D. R. 2215
Conde, A. 295
Congleton, J. 565
Corvo, F. 815, 823
Costa, D. 913
Crolet, J. L. 1137
Crousier, J. 529
Cruz-Orea, A. 1641
Czerwinski, F. 147, 1211, 1459

Dal Colle, M. 1221
Dalard, F. 1883
Darowicki, K. 1087
de Damborenea, J. 295
De Cristofaro, N. 1431, 2181
De Laet, J. 719
De Rincón, O. T. 823
De Wit, J. H. W. 483
Delgadillo, I. 1641
Drissi, S. H. 1699
Duffó, G. S. 1915
Duffo, G. S. 605
Duhlev, R. 1339
Duret-Thual, C. 913
Duthil, J.-P. 27

Eagar, T. W. 1415 Earnshaw, A. 1329 Echeverria, M. 823 El-Moneim, A. A. 305, 1965 Elfström Broo, A. 77, 1119 Elices, M. 2117 Engelhardt, G. 419 Ernst, P. 1133, 1329 Eyraud, M. 529

Faller, M. 1505 Fang, Q. 511 Fernández, A. 655 Fiaud, C. 1711 Figueiredo, M. O. 1561 Flis, J. 1757 Fonseca, I. T. E. 807 Ford, D. K. 2067 Fortier, S. M. 2215 Foster, B. 1291 Frangini, S. 1431 Frignani, A. 1221 Fu, G. Y. 1811 Fu, S. 465

Galland, J. 1239 Galvele, J. R. 605, 1915 Geary, M. 1341 Gendler, T. S. 1585 Génin, J.-M. R. 539, 1673, 1699 Gesmundo, F. 1093, 1811, 1831 Giordano, C. M. 1915 Giorgi, R. 1431 Girish, B. M. 1, 1443, 2143 Giusti, A. 27 Glass, G. K. 1001, 1451, 1657 Gleeson, B. 639 Gonzalez, J. A. 1109 Googan, C. G. 205 Grabke, H. J. 1193, 1501 Graham, M. J. 1897 Greegor, R. B. 2095

Haanappel, V. A. C. 1083 Habazaki, H. 9, 59, 305, 321, 339, 355, 589, 719, 731, 935, 1365, 1571, 1965, 2005 Haces, C. 823 Han, L. T. 199, 255 Hara, M. 627 Haran, B. 739 Hardie, D. 1545 Haruna, T. 1725, 1873, 1935 Hashimoto, K. 9, 59, 95, 305, 321, 589, 935, 1351, 1365, 1571, 1965, 2005 Hassanein, A. M. 1451 Hedberg, T. 77, 1119 Hemmes, K. 483 Hervaud, Y. 1925 Heusler, K. E. 1177 Heys, G. B. 565 Hirahara, H. 555 Hocking, M. G. 511 Hollatz, M. 231 Hong, T. 285, 961, 1491, 1665 Hope, G. A. 1153

Huang, J. H. 893

Ikeda, B. M. 1545 Ishikawa, T. 193 Itagaki, M. 901 Itoh, J. 193 Ives, M. B. 1897 Jana, N. R. 981 Johns, D. R. 473

Kawashima, A. 305, 321, 355, 589, 935, 1351, 1365, 1965, 2005
Keijzer, M. 483
Kelber, J. A. 987
Kikuchi, M. 95
Kläger, W. 1481
Klein, I. E. 385
Kobayashi, K. 281, 701
Kodama, T. 555
Kolman, D. G. 2067
Kubitzki, G. 1481
Kuo, H. S. 1051
Kurata, Y. 775

Lascovich, J. 1431 Latanision, R. M. 1415 Lavelle, B. 495 Laycock, N. J. 1133, 1771, 1791 Lee, C. C. 255, 1141 Lee, H.-J. 321 Leitão, E. 333, 377 Leu, G. S. 1165, 2035 Leygraf, C. 2039 Li, H. 1211 Li, X.-Y. 935, 1365 Li, Y. 855 Lillard, R. S. 1605 Lin, C. F. 1531 Lin, H.-C. 443 Lin, T.-C. 987 Lin, W. L. 1165, 2035 Lin, W. 1531 Lind Johansson, E. 77 Lipkin, D. M. 231 Liu, J. Y. 1021 Lizarbe, R. 1109 Lobo, V. M. M. 1561 Lopez, V. 1109 Lukito, H. 2151 Luu, W. C. 1051 Lytle, F. W. 2095

Mabe, M. 1339 Macdonald, D. D. 419, 1487 Maffi, S. 613 Maldonado, L. 823 Mankowski, G. 27, 495, 949 Mansfeld, F. 199, 255, 409, 1061, 1075, 1141 Manyurova, N. D. 1585 Marcus, P. 913, 1741 Marín, E. 1641 Marshall, G. W. 1329 Masuko, N. 1397 Matsunawa, A. 1415 McCafferty, E. 243 Mendoza, A. R. 815 Merino, C. 453 Mignone, A. 1431 Miranda, L. C. M. 1641 Mitsi, G. 613 Mitsui, H. 9, 59, 1571 Moaved, M. H. 1133 Mochizuki, K. 1757 Monticelli, C. 1221, 1949 Moon, S.-M. 399 Morcillo, M. 1561 Mori, K. 555 Moriena, G. 655 Mrowec, S. 9, 59, 1571 Müller, B. 1481 Mussati, G. 613

Nagumo, M. 285, 961, 1491, 1665 Nairn, J. 855, 1981 Nakazawa, H. 901 Nasrazadani, S. 1845 Nastasi, M. 1605 Nelson, T. O. 2067 Newman, R. C. 1133, 1771, 1971 Nisancioglu, K. 1397 Nishihara, H. 1625 Niu, Y. 1093, 1811, 1831 Noda, K. 901 Nomura, N. 1253 Nordlien, J. H. 1397 Novakova, A. A. 1585 Nozawa, K. 1625

Odnevall Wallinder, I. 2039 Oesch, S. 1505 Ogushi, T. 1491 Ohtsuka, T. 1253 Önal, A. N. 761 Ono, S. 1397 Otero, E. 133, 453, 1109 Page, C. L. 1657 Pal, T. 981 Pardo, A. 133, 453 Parkins, R. N. 159, 175 Parlapanska, S. 1321 Parlapanski, D. 1321 Paterson, B. A. 2215 Pebere, N. 1925 Pelaprat, N. 1925 Peng, Y. M. 1531 Peraldo Bicelli, L. 613 Pereira, D. 1561 Pérez, F. J. 133, 453 Piantini, M. 2181 Pomes, R. 1641 Pompe, W. 231 Popov, B. N. 739 Popova, S. 739 Postlethwaite, J. 1265 Prajitno, D. 639 Protopopoff, E. 1741 Puigdomenech, I. 43, 107, 969 Pytkiewicz, J. 1699 Pyun, S.-I. 399

Quintana, P. 1641

Raicheva, S. N. 1595 Rainha, V. L. 807 Raja, V. S. 1285, 2053 Ramasubramanian, M. 739 Rameau, J. J. 209, 1883 Ramesham, R. 2019 Razzini, G. 613 Refait, Ph. 1673, 1699 Refait, P. 539 Rezek, J. 385 Riciputi, L. R. 2215 Rincón, A. 823 Rocchini, G. 877, 1381, 1861 Rondelli, G. 1037 Rosales, B. M. 655 Rose, M. F. 2019 Ruiz, J. 2117

Sanada, N. 775 Sánchez, F. 1641 Sander, A. 77 Sasaki, T. 193 Satish, B. M. 2143 Sau, T. K. 981 Schaepers, D. 2193 Schmuki, P. 1897 Schoonman, J. 483 Schweinsberg, D. P. 1153 Scully, J. C. 1147, 1337, 1755 Seah, K. H. W. 1, 1443, 2143 Seo, M. 193 Seshadri, G. 987 Sharma, S. C. 1, 1443, 2143 Shemwell, K. 473 Shi, Z.-M. 443 Shibata, T. 1725, 1873, 1935 Shieu, F. S. 893 Shiga, C. 1757 Shimizu, K. 281, 339, 701, 719, 731 Shinata, Y. 627 Short, N. R. 1657 Sidky, P. S. 511 Silva, R. A. 333, 377 Simbi, D. J. 101, 203 Simon, L. 1673 Sivieri, E. 1037 Skeldon, P. 281, 339, 701, 719, 731 Sokolova, E. I. 1595 Song, G.-L. 443 Song, G. 855, 1981 Soto, F. 529 Spiegel, M. 1193 Sproule, G. I. 1897 St John, D. 1981 Stewart, J. 1791 Stiohn, D. 855 Stoner, G. E. 835 Stott, F. H. 1497 Stoyanova, A. E. 1595 Strehblow, H.-H. 115, 2193 Stroosnijder, M. F. 1083 Sui, G. 565 Sung, Y. C. 893

Takemoto, T. 1415
Talhi, B. 1239
Tan, M.-W. 589
Taylor, T. N. 1605
Thompson, G. E. 281, 339, 701, 719, 731
Titchmarsh, J. M. 565
To, X. H. 1925
Tobiyama, Y. 1757
Tomás, S. A. 1641
Tommesani, L. 1221

Szklarska-Smialowska, Z. 2151, 2171

Szpunar, J. A. 147, 1459, 1211

Svkes, J. M. 415

Toribio, J. 1687 Toyota, R. 1873, 1935 Trabanelli, G. 1949 Tribollet, B. 1711 Triki, E. 1711 Tromans, D. 1291, 1307 Trueman, A. 1153 Tsay, L. W. 1165, 2035 Tu, G. C. 1531 Turishcheva, R. A. 1585 Turnbull, A. 789

Urquidi-Macdonald, M. 419 Utrilla, M. V. 133, 453

Van Der Put, P. J. J. M. 483 Varela, F. E. 655, 775 Vargas, H. 1641 Véleva, L. 823, 1641 Venkatesh, J. 1443 Venugopal, A. 1285, 2053 Viani, F. 1093, 1811 Vicentini, B. 1037 Vilche, J. R. 655 Virtanen, S. 1897

Wadsworth, I. P. 1329
Wall, F. D. 835
Walter, K. C. 1605
Wang, Y. 1265
Watanabe, K. 901
Weinberg, F. 1291
Wenger, F. 1239
Wesolowski, D. J. 2215
White, R. E. 739
Wood, G. C. 281, 339, 701, 719, 731
Wu, J. K. 1051
Wu, W. 1093
Wu, W. T. 1811, 1831
Wu, X. 1981

Xia, Z. 2171 Xiao, H. 255

Yahalom, J. 385 Yan, R. 1093 Yan, R. Y. 1831 Yang, W. P. 913 Young, D. J. 639 Yu, G. P. 893 Zacchetti, N. 2181 Zhang, B.-P. 305, 2005 Zhang, G. 255 Zhang, J.-Z. 1657 Zhang, S. 1725

Zhilyaev, A. 1211 Zhou, S. 159, 175 Zhou, X. 719, 731 Zucchi, F. 1145, 1949 Zuo, Y. 465